

I. Amendments to the Claims

This listing of claims replaces without prejudice all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A radiation source module comprising:

a frame comprising a first support member, a second support member opposed to the first support member and a third support member interconnecting the first support member and second support member,

a radiation source assembly supported by the first support member and the second support member, and

a seal disposed on a first surface of the third support member, the seal operable to provide a substantially fluid tight seal between the first surface and a second surface which is adjacent to the first surface.

2. (Cancelled).

3. (Cancelled).

4. (Cancelled).

5. (Cancelled).

6. (Original) The radiation source module defined in claim 1, wherein a power supply is disposed in the frame.

7. (Original) The radiation source module defined in claim 1, further comprising an extraction system for moving the module between an in-use and in-service position with respect to a fluid treatment system.

8. (Original) The radiation source module defined in claim 1, wherein the seal comprises an expandable seal.

9. (Original) The radiation source module defined in claim 1, wherein the seal comprises a deformable seal.

10. (Previously Presented) A fluid treatment system comprising:

an open channel for receiving a flow of fluid, and
at least one radiation source module disposed in the channel, a surface of the at least one radiation source module, in combination with the open channel, confining fluid to be treated in a closed fluid treatment zone,

the radiation source module comprising: (i) a first

support member, (ii) a second support member opposed to the first support member, (iii) a third support member interconnecting the first support member and second support member, (iv) at least one radiation source assembly disposed in the fluid treatment zone and supported by the first support member and the second support member and (iv) a seal disposed on a first surface of the third support member, the seal operable to provide a substantially fluid tight seal between the first surface and a second surface which is adjacent to the first surface.

11. (Cancelled).

12. (Cancelled).

13. (Cancelled).

14. (Cancelled).

15. (Cancelled).

16. (Previously Presented) The fluid treatment system defined in claim 10, comprising a plurality of radiation source modules in side-by-side arrangement.

17. (Original) The fluid treatment system defined in claim 10, wherein a power supply is disposed on the frame.

18. (Original) The fluid treatment system defined in claim 10, further comprising an extraction system for allowing movement of the module between an in-use and in-service position with respect to a fluid treatment system.

19. (Original) The fluid treatment system defined in claim 10, wherein the radiation source module further comprises a blocking plate which obstructs the open channel when the radiation source module is in an extracted position.

20. (Original) The fluid treatment system defined in claim 10, wherein the seal comprises an expandable seal.

21. (Original) The fluid treatment system defined in claim 10, wherein the seal comprises a deformable seal.

22. (Currently Amended) A fluid treatment system comprising:

an open channel for receiving a flow of fluid,
a confining element moveable during flow of fluid in the open channel by rotation or translation between a first position to define a closed zone and a second position to define an open zone, and

at least one radiation source module disposed in the channel and having at least one radiation source element, at least a portion of the radiation source element being

disposed in the closed zone when the confining element is in the first position.

23. (Cancelled).

24. (Cancelled).

25. (Original) The fluid treatment system defined in claim 22, wherein the confining element and the radiation source module are integral.

26. (Original) The fluid treatment system defined in claim 22, wherein the radiation source element comprises a longitudinal axis disposed substantially parallel to the direction of fluid in the open channel.

27. (Original) The fluid treatment system defined in claim 22, wherein the radiation source element comprises a longitudinal axis disposed transverse to the direction of fluid in the open channel.

28. (Original) The fluid treatment system defined in claim 25, comprising a plurality of radiation source modules disposed substantially adjacent to one another.

29. (Original) The fluid treatment system defined in claim 28, wherein at least one sealing element is disposed

between adjacent pairs of the plurality of radiation source modules.

30. (Original) The fluid treatment system defined in claim 28, further comprising at least one spacer module disposed between adjacent pairs of the plurality of radiation source modules.

31. (Original) The fluid treatment system defined in claim 30, wherein the spacer module comprises a first seal disposed on the spacer module, the first seal arranged to provide a seal between the spacer module and a first adjacent radiation source module.

32. (Original) The fluid treatment system defined in claim 30, wherein the spacer module comprises a first seal and a second seal disposed on opposed sides of the spacer module, the first seal arranged to provide a seal between the spacer module and a first adjacent radiation source module, and the second seal capable arranged to provide a seal between the spacer module and a second adjacent radiation source module.

33. (Cancelled).

34. (Cancelled).

35. (Cancelled).

36. (Cancelled).

37. (Cancelled).

38. (Cancelled).

39. (Cancelled).

40. (Cancelled).

41. (Cancelled).

42. (Cancelled).

43. (Cancelled).

44. (Cancelled).

45. (Cancelled).

46. (Cancelled).

47. (Cancelled).

II. Remarks

Reconsideration and allowance of the present application are respectfully requested.

Claim 22 has been amended to clarify that the confining element is moveable during flow of fluid in the open channel. This is supported throughout the present application, for example, in Figure 13 and the accompanying description in Paragraph [0051]. Claims 33, 35 and 37-47 have been cancelled without prejudice or disclaimer. Accordingly, it is believed that this amendment does not add new subject matter to present application.

Claims 1, 6-10, 16-22 and 25-32 currently stand in the present application. Claims 1, 10 and 22 are independent.

Preliminarily, Applicant wishes to state that all claim amendments submitted herein have been effected for the sole purpose of clarifying the scope of the present invention and have not been made in response to any particular objection raised by the Examiner.

The rejection of claims 33, 35 and 37-47 under 35 U.S.C. §112 (second paragraph) in Paragraph 2 of the outstanding Official Action is moot since these claims have been cancelled without prejudice or disclaimer.

In Paragraph 2 (second instance) of the outstanding Official Action, the Examiner rejected claims 1, 9-10, 21, 22, 25, 27, 33, 35, 37-43 and 47 under 35 U.S.C. §102(b) as being purportedly anticipated by United States Patent No. 4,367,410 [Wood]. This rejection is traversed. Reconsideration is requested in light of the following remarks.

Claims 1 and 10 currently on file state that the first and second support members support the radiation source assembly and that these support members are interconnected by the third support member. In Wood, the radiation source assemblies are supported by side plates 24 and 26. The larger transfer baffles 14 and 18 of Wood referred to by the Examiner do not interconnect the side plates. This can be clearly seen in Figure 2 of Wood. Further, the Examiner makes reference to the presence of a pair of seals along the outer walls of baffles 14 and 18. Initially, Applicant notes that none of the first support member, the second support member or the third support member in claims 1 and 10 read on the baffles 14 and 18 of Wood. Notwithstanding this, it is not clear where the Examiner is seeing reference to seals in Figures 1, 2, 4 and 5 of Wood. With reference to Claim 22, while Applicant disagrees with the Examiner's interpretation of Wood, the claim has been amended to clarify that the confining element is moveable during flow of fluid in the open channel. Clearly, Wood neither teaches nor suggests any structure which would function in this manner.

Accordingly, Applicant submits that the present invention, as defined by independent claims 1, 10 and 22 distinguishes patentably over Wood.

In Paragraph 3 of the outstanding Official Action, the Examiner rejects claims 22, 25, 26, 33, 35, 37-39 and 45 under 35 U.S.C. §102(b) as being purportedly anticipated by International Publication Number WO 99/14161 [Wedekamp]. This rejection is traversed.

Applicant notes that claim 22 recites that at least a portion of the radiation source element is disposed in the closed zone when the confining element is in the first position. In contrast thereto, Wedekamp discloses placement of the radiation source element downstream of the confining element.

Accordingly, the Examiner is requested to reconsider and withdraw the rejection of claims 22, 25, 26, 33, 35, 37-39 and 45 under 35 U.S.C. §102(b).

In Paragraph 4 of the outstanding Official Action, the Examiner rejected claims 22, 25, 27-28, 30, 33, 35, 37-39 and 45 under 35 U.S.C. §102(b) as being purportedly anticipated by United States Patent No. 5,564,765 [Scheurch]. This rejection is traversed. Reconsideration is requested.

Again, Applicant points out that claim 22 requires the presence of at least a portion of the radiation source

element in the closed zone defined by the confining element being placed in the first position. The Examiner relies on gates 13 and 15 in Scheurch as being the confining element. Clearly, in the Scheurch arrangement, at least a portion of the radiation source element is not disposed in the closed zone defined by placement of the confining element in the first position.

The Examiner is requested to reconsider and withdraw the rejection of claims 22, 25, 26, 33, 35, 37-39 and 45 under 35 U.S.C. §102(b).

The rejection in Paragraph 5 of the outstanding Official Action is moot since the subject claims have been cancelled without prejudice or disclaimer.

In Paragraph 6 of the outstanding Official Action, the Examiner rejected claims 22, 25-26 and 28 under 35 U.S.C. §102(b) as being purportedly anticipated by United States Patent No. 5,418,370 [Maarschalkerweerd]. This rejection is traversed. Reconsideration is requested in light of the following remarks.

Confining element 104 taught in Figure 3 of Maarschalkerweerd is not shown as being moveable during flow of fluid in the open channel by rotation or translation. Further, in this embodiment of Maarschalkerweerd, there is no teaching or suggestion any structure which would function in the same manner as the confining element recited in claim 22.

Accordingly, the Examiner is requested to reconsider and withdraw the rejection of 22, 25-26 and 28 under 35 U.S.C. §102(b).

The prior art rejections set out in Paragraphs 7, 8, and 9 of the outstanding Official Action are believed to be moot since the subject claims are dependent claims that refer to independent claims that are believed to be allowable.

In view of the above amendments and remarks, it is believed that this application is now in condition for allowance, and a Notice thereof is respectfully requested.